

Pacific Packet Radio Society Newsletter

January 1988

PPRS Meeting announcement:

The February 2 meeting will feature the **Vice President's Special** (no, this is not a culinary treat) and will be announced at the meeting. A probable subject of the meeting will be the election of President and Secretary. Any takers or "stuckees"? As usual PPRS meets the first Tuesday of the month at 7:30 pm at the Ampex Cafeteria, 411 Broadway, Redwood City. All are encouraged to attend and make their feelings known about the leadership of PPRS, and renew your membership if you haven't done so already.

Disaster Communications Plan (KN3U):

The following plan is a plan for the replacement of the existing Maryland Civil Defense (MCD) teletype network with a packet radio network.

The *system requirements* were that the network interconnect the State CD and OES offices with the EOC's in each city. Each node must provide for hardcopy output. The network would handle messages of announcement or personal nature with multiple copies to those nodes on a distribution list. The network would provide for error free delivery within a timely interval, app. 5 min. Authentication and audits would be available by a combination of procedure and system implementation. These would include signed copies at the originating node, and a log of received messages would be stored on disk automatically at the receiving nodes. The system would be capable of handling various types of reports within a timely interval. These reports would include weather observations, damage assessments, casualties and logistical support. Messages and reports could be prepared offline and transferred to network computers via floppy or wire. A broadcast/distribution list message would be sent to indicate a particular report is available. Bulletins would be broadcast (ex: Declaration of state of emergency).

The *general requirements* were that the network computers should be connectable to floppies, modems, and ethernet. A single node failure would be tolerated. Network nodes would store redundant (redundant!) routing information. The system would be easy to use and require a minimum of operator training. The system would provide for multiple simultaneous transactions. The final implementation would likely be on a government frequency but would be prototyped on amateur frequencies.

The equipment considerations: The node computer would be a PC due to the availability of various types, hardware and software configurations. The radios would **not** be amateur type with wide front ends. They should be FCC type accepted commercial fixed frequency units. The node configuration would include power and antenna considerations in order to establish reliable RF links to adjacent nodes.

The packet protocol would likely use AX.25 as a base. PBBS software was considered, but most implementations on PCs don't fulfill the simultaneous transaction requirement. TCP/IP works with different TNCs and has various useful applications available: telnet, ftp (for reports), smtp (for message delivery). Further requirements are for broadcast, dynamic routing and multiple connects.

The conclusion is that TCP/IP does much but needs application polish. Contact KN3U for further details.

Design error in AEA PK-232 (WB7UGZ @ N6HAV):

Rick, WB7UGZ, has discovered a possible design error in the AEA PK-232. Parameters for the PK232 are stored in battery backed-up RAM. The batteries, 2 AA cells, are in a holder in the top of the TNC case. However, the battery holder is located above the voltage regulator heatsink on the main board. During normal operation the heatsink gets very warm and heats up the batteries. This shortens the battery life and increases the risk of explosion. **The fix:** The battery holder is held in place by double sided sticky tape. Simply remove it and move it to the opposite side of the case. The power leads are already long enough for this simple fix.

Kenwood 221A & MFJ 1270:

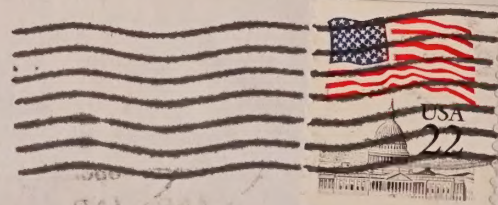
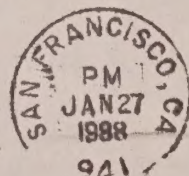
I've *finally* managed to get on the packet airwaves with reasonable power and sensitivity (required since my antenna is propped up by the bookshelf behind me). I've discovered that my TNC works quite nicely listening to the RX detector output (app 150mV/600 ohm) provided at the mic jack (for linking purposes). Since the volume control is independent of this output I can monitor the frequency for packet activity. The cable is simply straight through...no DC blocking caps or isolation transformers necessary. A useful perversion of an interesting feature.

Ponderings:

I've got some questions about PBBS behaviour. Maybe there's a few PBBS experts out there who can answer these simple, possibly ignorant, questions. Since my PBBS experience is limited to 'IIU and there may be other systems out there that behave different, please enlighten me. (1) When I type in "L 640" to list the message description for message #640 why does it list all the messages from the latest to either the earliest or #640 (can't remember which it did)? Seems to me what I requested was *obvious* but... (2) What are the differences (read advantages) of 'IIU / WORLI / other bbs systems. (3) Why doesn't 'IIU know there's traffic (or not) for me and not ask me to "Type in LT to list traffic" unnecessarily? I do recall entering my zip code as demanded a few months ago.

The newsletter thrives on the experiences of its readers. Share with the other readers any enlightening packeteering news you find. Features would be appreciated. Others would like to know the latest in NETROM networks, other networking efforts, TCP/IP experiments, hardware and software (DSP, PBBS, user interface) projects. What is YAPP? I presume it's not the noise a dog makes at 3 am. Has any one out there made a portable solar charged, battery backed up digipeater or emergency packet station? Almost anything packet related is suitable for this newsletter. Share your knowledge with the rest of the packet community. I can be packeted: KI6AP @ N6IIU-1. If you're not on packet yet and have some questions you can write me: Mike Youngberg, KI6AP, 181 Merced Drive, San Bruno, 94066-2519.

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